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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,993	09/18/2000	Gangfeng Cai	2039.006100	4102

7590 02/13/2002

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7676 Hillmont  
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Houston, TX 77040

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 02/13/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/664,993

Applicant(s)

CAI ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb. 7, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Amendment/Pending Claims***

1. Pursuant to entry of the amendment submitted on February 7, 2002 (Paper No. 9), claims 1-17 are pending.

### ***Rejection Withdrawn***

2. The 35 USC 112 rejection of claims 1-17 for indefiniteness, as set forth in section 4 of the November 7, 2001 Office Action (Paper No. 8), is withdrawn in view of Applicants' amendments to the claims in Paper No. 9.

### ***Rejections Maintained***

3. The 35 USC 103 rejection of claims 1-12 and 16-17 as unpatentable over Ching (US 5,744,246) in view of Nordstrom (US 3,536,687), as set out in section 7 of Paper No. 8, is maintained for reasons of record.
4. The 35 USC 103 rejection of claims 13-15 as unpatentable over Ching and Nordstrom taken with Katsumoto et al (US 6,139,770), as explained in section 8 of Paper No. 8, is maintained for reasons of record.

### ***Response to Arguments***

5. Applicant's arguments filed in Paper No. 9 have been fully considered but they are not persuasive.

The arguments in Paper No. 9 will be responded to in the order in which they were presented.

On page 3, Applicants argue that the Examiner alleges that Ching teaches a container as recited in claim 1.

However, the Examiner actually stated, in section 7 of Paper No. 8, that Ching teaches “constructs”, not containers. In the final sentence of that section, the examiner said that the Ching constructs are “used for food packages”, not that they are containers.

Furthermore, the ribbons of Ching can be used as tubes (col. 8, line 15) and, to the extent that they may be incorporated into containers, such as the packages shown in Figure 4, the packages made comprise the ribbon, and its construct. In other words, Applicants claim require containers “comprising” the multilayer construct and Ching shows such containers in Figure 4.

On page 4, Applicants argue that Ching’s Figure 1 shows only a single barrier layer.

However, what Ching’s Figure 1 actually shows is a five layered embodiment, with the barrier material (B) enveloping/sandwiching the oxygen scavenger (C) layers of the and the heat sealable layer (A) enveloping/sandwiching the barrier material (col. 7, lines 46+). At the midpoint of Ching’s Figure 1, the construct is a multilayered one having five layers and an A/B/C/B/A configuration.

On page 4, Applicants argue that Nordstrom only teaches polycyclohexenes for coating applications.

However, Nordstrom actually discusses films made from polycyclohexenes. Note that the layers in the Ching constructs can be films. Note col. 8, line 15 of Ching, where the ribbon is in the form of a tube made by film extrusion.

Also, the use of the Nordstrom polycyclohexenes as scavenging materials is based on Nordstrom's teachings at col. 1, lines 49-52, where the oxidative cross-linkability of the polycyclohexenes in air is discussed. It would be obvious to employ films of the oxidatively reactive polycyclohexenes of Nordstrom as the scavenging material in the multilayer packages (i.e., containers) depicted in Figure 4 of Ching.

On page 4, Applicants argue that Katsumoto's teaching of photoinitiators does not overcome the alleged "deficiencies" of the containers suggested by the combination of Ching and Nordstrom.

However, those "deficiencies" are illusory, especially when one considers the explanation given here and in Paper No. 8 of the references teachings and Applicants' claims.

The Katsumoto photoinitiators are employed with oxygen scavenging materials. Therefore, their inclusion in the oxygen scavenging component of the containers suggested by the combination of Ching and Nordstrom would have been obvious.

### ***Final Rejection***

**6. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1772

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


**Conclusion**

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



SMN/smn  
February 12, 2002  
09664993(10)

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772 2/12/02